



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/032,951	10/26/2001	Majid Syed	708034-605-003	7289
7590 12/27/2007 Blaney Harper Jones, Day, Reavis & Pogue 51 Louisiana Avenue, NW Washington, DC 20001			EXAMINER STRANGE, AARON N	
			ART UNIT	PAPER NUMBER
			2153	
			MAIL DATE	DELIVERY MODE
			12/27/2007	PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary

Application No.

10/032,951

Applicant(s)

SYED, MAJID

Examiner

Aaron Strange

Art Unit

2153

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 24 September 2007.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-10 and 12-50 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-10 and 12-50 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date: _____ |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date: _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

1. The Examiner would like to note that the present application has been reassigned to a new Examiner.

Claim Objections

2. Claim 6 is objected to because of the following informalities: The claim contains a typographical error "system for" (the "A" is missing). Appropriate correction is required.

Response to Arguments

3. Applicant's arguments with respect to claims 1-10 and 12-50 have been considered but are moot in view of the new ground(s) of rejection.

Claim Rejections - 35 USC § 103

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

5. In the interest of expedited prosecution, the Examiner would like to note that several of the present claims (i.e., 1 and 47-50) use functional language to describe claim elements. For example, the terms "configured for", "configured to", "enabled for",

“adapted for”, and “adapted to” raise questions as to the limiting effect of the functional language that follows them. The Examiner recommends amending the claims to contain positive recitations of the actions performed by the claim elements, rather than merely stating that the elements are “configured to” perform some future act. In the event that a hardware element is intended to contain software, which when executed, causes the hardware element to perform a function, the language of the claim should clearly express that relationship.

In the interest of expedited prosecution, all of these limitations have been rejected below, but Applicant is encouraged to amend the system/apparatus claims so that the claimed functions are positively recited, to ensure that those limitations may be given patentable weight.

6. Claims 1-3, 5-16, 17, 19-31, 32-50 are rejected under 35 U.S.C. 103(a) as being unpatentable over Perlman et al. (US 5,978,381) in view of Corts et al. US 2002/0095228) further in view of Getsin et al. (US 6,529,949)

7. As per claim 1, Perlman teaches a system comprising:
a broadcast system (col. 4, ll. 61-67) comprising a gateway receiving and intelligently broadcasting digital content (col.10 lines 27-64 - multicast server);
the gateway comprises:

a scheduler receiving data content (apparent from col.10 lines 47-55), separating the data content into a first and second types (col.13 lines 45-55, high bandwidth content and updates);

scheduling broadcast of the first type of data content to the client device during selective first broadcast period (apparent from col.10 lines 47-55);

scheduling broadcast of said second type of data content to the client during a second broadcast time period (col.13 lines 45-55);

the client device recombine the first and second content (inherent to form the complete content).

Perlman does not specifically disclose that the broadcast medium includes a digital radio broadcast medium or enabling the content for use during a scheduled time period by enabling/disabling a deactivate flag at the scheduled time.

Corts discloses a similar system for broadcasting content to multiple recipients. Corts teaches broadcasting content such as news or advertisements through digital radio broadcasts (digital data is transmitted over radio broadcast)(¶13). This would have been an advantageous addition to the system disclosed by Perlman since it would have allowed digital content to be transmitted via radio networks, in addition to the numerous other network types already disclosed by Perlman (Perlman; col. 4, ll. 61-67), allowing radio broadcasters to increase their advertising exposure and provide visual enhancements to conventional audio programming (Corts; ¶19-20).

Getsin also discloses a similar system for distributing content and content updates to a plurality of users (Abstract). Getsin teaches delivering a first type of content (event is

stored in memory on a client)(col. 11, ll. 65-66), but preventing the user from accessing the content until after supplemental information is received and a scheduled time has arrived (col. 12, ll. 35-42). Getsin further discloses that the enabling and disabling of the content occurs without user instructions (information including the start time is received from the host computer)(col. 12, ll. 35-42). This would have been an advantageous addition to the system disclosed by Perlman and Corts since it would have allowed the content provider to control when pre-fetched content could be played back by the user, allowing the content provider to supplement or modify the presented content and/or limit access to portions of the content as desired (Getsin; col. 3, ll. 52-55).

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to distribute content via broadcast radio networks and permit the content provider to remotely control a clients access to content, since it would have given content providers the ability to supplement or modify content previously supplied to users via a radio broadcast network.

8. As per claim 2, Perlman teaches the first content requires high bandwidth (col.2 lines 50-55) and the second content requires relatively lower bandwidth (col.13 lines 50-55, it is apparent that updates data would requires lower bandwidth than the entire content).

9. As per claim 3, Pearlman teaches activating includes receiving an enable flag at the client (col.13 lines 14-24 when payment is made).

10. As per claim 5, Perlman teaches the first data content comprises: images and graphic [col.11 lines 10-13], song [audio], and digital data purchase [col.13 lines 14-24 - pay content].

11. As per claim 6, Perlman teaches the second data content comprises: accompanying text, fixed data [col.13 lines 50-55 updates] and data to complete the first content [col.11 line 34 retransmission].

12. As per claim 7, Perlman teaches the first content is broadcast during low usage period (col.2 lines 50-55 -off peak hour).

13. As per claim 8, Perlman teaches the second content is received during client usage period (col.13 lines 45-55).

14. As per claim 9, Perlman teaches the first content is broadcast during low usage period (col.2 lines 50-55 -off peak hour) and the second content is received during client usage period (col.13 lines 45-55).

15. As per claim 10, Perlman teaches the first content is broadcast before the second content (apparent from col.13 lines 45-55).

16. As per claims 11-13, Perlman teaches the content is broadcast with deactivate flag so that it is stored but not immediate use (col.13 lines 14-24 - Condition viewing restriction until fee is paid. It is apparent that an activation flag would be send after the client pay to activate the content for viewing.)

17. As per claim 14-15, Pearlman does not specifically disclose the client device being a digital radio, handheld devices, etc. The type of client device used would have been a matter of choice and would have been an obvious variation from the teaching of Pearlman. It would have been obvious to apply Pearlman teaching as modified to portable client device such as digital radio, handheld devices, wireless telephone, etc. because it would have enable the user to have access to high bandwidth content on the go.

18. As per claim 16, Pearlman teaches the data originated from Internet and web site (col.9 lines 49-68), advertiser and ISP (col.8 lines 45-65).

19. As per claims 17, 19-31, they are rejected under similar rationales as for claims 1-3, 5-16 above. It is apparent that Pearlman would have had an activation message to the client device (col.13 lines 14-25 - after a client pays a fee to view the content).

20. As per claim 32, Perlman teaches a method for dynamic scheduling of broadcast content for client devices, the method comprising:

receiving first data content from a digital broadcast source (col.20 lines 27-47);

storing in local storage said first data content (col.11 lines 5-10, downloading into caching store 220);

receiving a second data content comprising: missing data, new data and changes (col.10 lines 55-63 - new data which has not been previously downloaded, col.11 lines 34 - retransmission, col.13 lines 50-55 - updates to data downloaded previously);

combining associated first and second data (inherently updated data and missing data would be combined with previous data to form a complete content).

Perlman does not specifically disclose that the broadcast source is a digital radio broadcast source or activating some of the received data content for use during a scheduled time period.

Corts discloses a similar system for broadcasting content to multiple recipients. Corts teaches broadcasting content such as news or advertisements through digital radio broadcasts (digital data is transmitted over radio broadcast)(¶13). This would have been an advantageous addition to the system disclosed by Perlman since it would have allowed digital content to be transmitted via radio networks, in addition to the numerous other network types already disclosed by Perlman (Perlman; col. 4, ll. 61-67), allowing radio broadcasters to increase their advertising exposure and provide visual enhancements to conventional audio programming (Corts; ¶19-20).

Getsin also discloses a similar system for distributing content and content updates to a plurality of users (Abstract). Getsin teaches delivering a first type of content (event is stored in memory on a client)(col. 11, ll. 65-66), but preventing the user from accessing the content until after supplemental information is received and a scheduled time has arrived (col. 12, ll. 35-42). Getsin further discloses that the enabling and disabling of the content occurs without user instructions (information including the start time is received from the host computer)(col. 12, ll. 35-42). This would have been an advantageous addition to the system disclosed by Perlman and Corts since it would have allowed the content provider to control when pre-fetched content could be played back by the user, allowing the content provider to supplement or modify the presented content and/or limit access to portions of the content as desired (Getsin; col. 3, ll. 52-55).

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to distribute content via broadcast radio networks and permit the content provider to remotely control a clients access to content, since it would have given content providers the ability to supplement or modify content previously supplied to users via a radio broadcast network.

21. As per claim 33, Perlman teaches the first content requires high bandwidth (col.2 lines 50-55) and the second content requires relatively lower bandwidth (col.13 lines 50-55, it is apparent that updates data would requires lower bandwidth than the entire content).

22. As per claim 34, Perlman teaches the first data content comprises: images and graphic [col.11 lines 10-13], song [audio], and digital data purchase [col.13 lines 14-24 - pay content].

23. As per claim 35, Perlman teaches the second data content comprises: accompanying text, fixed data [col.13 lines 50-55 updates] and data to complete the first content [col.11 line 34 retransmission].

24. As per claim 36, Perlman teaches the first content is received during low usage period (col.2 lines 50-55 -off peak hour).

25. As per claim 37, Perlman teaches the second content is received during client usage period (col.13 lines 45-55).

26. As per claim 38, Perlman teaches the first content is received during low usage period (col.2 lines 50-55 -off peak hour) and the second content is received during client usage period (col.13 lines 45-55).

27. As per claim 39, Perlman teaches the first content is received before the second content (apparent from col.13 lines 45-55).

28. As per claims 40-41, Perlman teaches the content is stored with non-enable flag so that it is stored but not immediate use (col.13 lines 14-24 - Condition viewing restriction until fee is paid).

29. As per claim 42, Pearlman teaches activating includes receiving an enable flag at the client (col.13 lines 14-24 when payment is made).

30. As per claims 43-44, Perlman does not specifically disclose the client device being a digital radio, handheld devices, etc. The type of client device used would have been a matter of choice and would have been an obvious variation from the teaching of Pearlman. It would have been obvious to apply Pearlman teaching as modified to portable client device such as digital radio, handheld devices, wireless telephone, etc. because it would have enable the user to have access to high bandwidth content on the go.

31. As per claim 45, Perlman teaches the data originated from Internet and web site (col.9 lines 49-68), advertiser and ISP (col.8 lines 45-65).

32. As per claim 45, it is rejected under similar rationales as applied to claim 17 above. It is apparent that the content broadcast servers in Pearlman are aware of the delivery success for each client since each broadcast server tracks which clients have transmission errors and require retransmission (see Pearlman col. 12 line 53 – Col 13, line 13).

33. Claims 47-50 are rejected under similar rationales as applied to the other independent claims above.

34. Claims 4 and 18 are rejected under 35 U.S.C. 103(a) as being unpatentable over Perlman et al. (US 5,978,381) in view of Corts et al. US 2002/0095228) further in view of Getsin et al. (US 6,529,949) further in view of Sampath et al. (US 6,266,774).

35. As per claim 4, Perlman does not teach providing a time-to-live value the specifies a time interval that upon expiration, the client device deleting at least a part of the recombined data. Perlman teaches providing content on a trial basis (col.13 lines 20-23). It is well known in the art to have expiration time period on trial content (see Sampath col.1 lines 30-50). Manually removing expired content is a chore on the user (Sampath col.1 lines 30-50). Hence, it would have been obvious for one of ordinary skill in the art to cause the client device to delete content that is not activated after a time-to-live period because it would have permitted the system to automatically clean up and reduces wasted storage space on the client device.

36. As per claim 18, it is rejected under similar rationale as for claim 4 above.


Conclusion

37. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Aaron Strange whose telephone number is 571-272-3959. The examiner can normally be reached on M-F 8:30-5:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Glen Burgess can be reached on 571-272-3949. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

AS
12/19/07


GLEN B. BURGESS
SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 2100